

ADLN - PERPUSTAKAAN UNIVERSITAS AIRLANGGA

**EFEKTIVITAS PERENDAMAN SUSU PASTEURISASI KEMASAN,
MINUMAN ISOTONIK DAN AIR KELAPA TERHADAP JUMLAH SEL
PRIMER LIGAMEN PERIODONTAL
(Penelitian Eksperimental Laboratoris pada Tikus Wistar Jantan)**

ABSTRAK

Latar Belakang : Avulsi gigi adalah lepasnya gigi secara utuh dari tulang alveolar dengan hilangnya suplai aliran darah ke pulpa secara menyeluruh. Alternatif perawatan avulsi gigi salah satunya yaitu replantasi atau mempertahankan vitalitas sel ligamen periodontal di luar soket pada media perendaman yang sesuai sebelum di replantasi. Terdapat beberapa media perendaman untuk mempertahankan gigi yang avulsi. **Tujuan :** Untuk mengetahui apakah susu pasteurisasi kemasan Bear Brand[®], minuman isotonik Pedialyte[®] dan air kelapa dapat digunakan sebagai alternatif media perendaman gigi avulsi terhadap vitalitas sel primer ligamen periodontal. **Metode :** Sampel penelitian 24 gigi insisif kiri rahang bawah tikus yang telah di ekstraksi kemudian direndam selama 60 menit lalu dibagi menjadi 4 kelompok. Kelompok A direndam dalam 5ml Larutan Bear Brand[®], kelompok B direndam dalam 5ml larutan Pedialyte[®], kelompok C direndam dalam 5ml larutan air kelapa dan kelompok D direndam dalam 5ml larutan salin isotonik sebagai kelompok kontrol. **Hasil :** Persentase sel primer ligamen periodontal hidup susu pasteurisasi kemasan Bear Brand[®] 85,76% \pm 7,08, minuman isotonik Pedialyte[®] 73,89% \pm 1,32 dan air kelapa 65,60% \pm 11,08. **Kesimpulan :** Susu pasteurisasi kemasan Bear Brand[®] memiliki persentase kehidupan sel primer ligamen periodontal yang paling tinggi dan merupakan media perendaman paling efektif dibandingkan minuman isotonik Pedialyte[®] dan air kelapa.

kata kunci : avulsi gigi, minuman pasteurisasi kemasan, minuman isotonik, air kelapa

**EFFECTIVENESS OF IMMERSION PASTEURIZED MILK PACKAGE,
ISOTONIC DRINKS AND COCONUT WATER TO THE NUMBER OF
PERIODONTAL LIGAMENT PRIMARY VITAL CELL
(Experimental Research Laboratory In Wistar Male Rats)**

ABSTRACT

Background : Avulsed teeth is loss of teeth intact from alveolar bone with loss of blood supply to the entire pulp. The alternative treatment of avulsed teeth is replantation or maintain the vitality of periodontal ligament cells outside the socket in appropriate storage media before replantation treatment. There are many storage media to maintain the avulsed teeth. **Purpose** : To aimed pasteurized milk package Bear Brand[®], isotonic drinks Pedialyte[®] and coconut water can be used for alternative storage media avulsed teeth to periodontal ligament primary vital cells. **Methods** : Samples were 24 lower left insisivus teeth of mice that have been extracted and immersed for 60 minutes and then divided into 4 groups. Group A immersed in a 5ml pasteurized milk package Bear Brand[®] solution, group B in a 5ml Isotonic Drinks Pedialyte[®] solution, group C in a 5ml coconut water solution and group D in a 5ml an isotonic saline solution as a control group. **Results** : The percentage of periodontal ligament primary vital cell of the pasteurized milk package Bear Brand[®] is $85,76\% \pm 7,08$, isotonic drinks Pedialyte[®] $73,89\% \pm 1,32$ and coconut water $65,60\% \pm 11,08$. **Conclusion** : Pasteurized milk package Bear Brand[®] has a highest percentage of periodontal ligament primary vital cell and the most effective storage media compared isotonic drinks Pedialyte[®] and coconut water.

Keywords : avulsion teeth, pasteurized milk package, isotonic drinks, coconut water